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THE POACHERS SURPRISED.

THE FATAL SHOT.

PART II.

"THESE papers," said old Sutton, "contain the written confession of everything that happened that dreadful night, Mr. Harry; they were written by Tom Bird, who had received a good education when a boy; and you will find a true and particular account of everything as happened, and in better

No. 396. 1859.

language, sir, than I could tell it to you, even if I was able; though the meaning of every word written in them papers is burnt into my brains, if the words themselves is not."

I thanked him, and took the papers.

"And now, Sutton, you go to bed; I shall sleep here, as I told you; so you may lock up as soon as you like."

"Well, Mr. Harry, we'll put you up as well as

II II

we possible can, but it won't be like the Hall, sir, you know; but still, if you'd a mind not to go home——"

"No, Sutton, I won't go home to-night; the family are not down yet, and I should expect to meet a ghost behind every picture in the gallery, as I went to my room; and if you'll put me up here——"

"That I will with pleasure, sir, as in dooty bound."

"Thank you, Sutton; good night then;" and I shook the old man heartily by the hand.

"Good night, Mr. Harry; the same kind, frank young gentleman as ever!" he muttered, as he left the room.

"Young gentleman!" I smiled, and looked at the reflection of my sallow sunburnt cheeks and grisly hair; *they* had not received such a compliment for many a day. Poor old Sutton! a warmer-hearted, honest, more attached servant never existed; he was one of a race now nearly extinct. I put a fresh log on the fire, lit a fresh cigar, and eagerly turned to my roll of papers. They were headed, "The Confession of Thomas Bird," and were written in a bold, round, clear hand, and, considering the position of life of the man, in remarkably good language. He had been a schoolmaster once, I afterwards discovered.

THE CONFESSION OF THOMAS BIRD.

"It's no matter how Dick and I persuaded James West to take to poaching. It is enough to say that *we* did so, and hard work we had to get the better of his scruples, for James was an honest lad, I will say that for him; and it's my belief, that if the battoo system had not been brought into this parish, James West would never have become a poacher. But a poacher he did become, though never a very hearty one; he was always half ashamed of what he was doing, it seemed to me. He had been out about half-a-dozen times with Dick and me, but only in the outlying coverts; we had never been able to get him into any of the home preserves, until one day, the fifteenth of December—a day, never, never to be forgotten by me, or any that were with me. The gentlemen had been shooting Purrwood, 'beaters' of course, and James West was one of them. After it was over, I joined West, as he was going home, for Dick and I had determined to have a shy at Purrwood that very night, to see if we could pick up some of the wounded game, which was sure to be lying about in the wood, and we wanted to persuade James West to come with us, if we could manage it, for he knew the wood better than we did, by a good deal; and besides, having been beating them all day, was sure to know whereabouts the wounded birds were likeliest to be.

"As soon as I came up to him, I saw that something was the matter; he looked red and angry, and answered my question, as to what sport they had had, with an oath, and 'he didn't know, nor didn't care.' I soon found out the cause of his anger. It seems that he had knocked a rabbit on the head, whilst he was beating, and had put it in his pocket, instead of carrying it in his hand, 'to be out of his way,' as he said, and not with any

intention of stealing it, and I am quite sure he spoke the truth. But it seems Dodd, the under-keeper, who saw the legs of the rabbit sticking out of his pocket, didn't believe him, but taxed James with meaning to steal it, and threatened to tell the Squire: upon which West's blood got up, and high words passed between them. The Squire hearing the dispute, inquired the cause, and he told West that he *hoped* what he said was true, but that he must say it was a very suspicious circumstance, putting the rabbit in his pocket. Why didn't he carry it in his hand, as was usual? 'I made him no answer,' said James to me, 'but I might have said, 'Do you think I should have been such a fool as to leave the rabbit's legs dangling out of my pocket, if I had been going to steal it?' I didn't want his rabbit. I can get a dozen of 'em any night I choose, or hares either, or pheasants, if I have a mind to it.'

"I have no doubt in my own mind that West spoke the truth about the rabbit; I am certain he had not the least idea of stealing it: as he said, it wasn't worth his while. No, the Squire was wrong there, and I am very sorry for it now, though at the time I was very glad. We poor people have feelings as well as our betters; perhaps it would be as well if our superiors paid more attention to them than they do. In the present state of West's mind, I found little difficulty in persuading him to join Dick and me that night in beating up Purrwood for the wounded game. We knew that the keepers would be out at daybreak on the same errand, and so we thought we would just take their work off their hands for this time.

"At one o'clock we agreed to meet in an old chalk-pit just outside the wood; and, true to his appointment, James West made his appearance. There was a good moon overhead, but the sky was very cloudy, and a high wind blowing, so that the light of the moon was often obscured. After a short consultation in the chalk-pit as to our plan of operations, we entered the wood, West leading the way up a broad green path that cut the wood in two. He took upon himself the task of bringing us to that part of the wood where most of the wounded birds were. Presently a white rabbit ran across the path; West aimed at it, but didn't fire; we each had a gun.

"'There's a chap we can see to shoot, if we can't see nothing else,' he said; 'we'll have a white rabbit for supper, let come what will on it.'

"Poor fellow! little did he think what sort of a white rabbit he was destined to shoot. Well, we had been in the wood about an hour and a half, and had picked up a good lot of wounded game of all sorts, besides knocking over a few hares and rabbits with our sticks, and smoking a brace or two of pheasants off their perch. We had not fired off a gun yet, indeed we never did if we could help it: we took them more to defend ourselves from the keepers than for anything else. We were all three standing under a big beech packing our game into sacks, one for each, when I thought I heard the crackling of a branch.

"'Whist!' I said; and we all three dropped work instantly, and listened. The snapping of the dead

branches and the rustling of leaves was now plainly heard, and almost immediately a large black dog made its appearance amongst us. We knew him in a moment: he was the under-keeper's dog; the scent of our dead game had no doubt brought him. It was plain enough that the keepers were out, and we were in a pretty fix. We tried to coax the dog to come to us, meaning to destroy him if we could catch hold of him, but he was too knowing for that, and only answered our coaxing with a low growl. Presently a whistle was heard some way up the wood; the dog pricked his ears, and upon its being repeated, he ran swiftly off. This was a great relief to us, and, snatching up our sacks, we made for the opposite side of the wood to where the whistle seemed to come from, with every chance of effecting our escape; but the Almighty had willed it otherwise. We had nearly reached the edge of the wood, and had come to a halt, in order that one of us should go forward to see that the coast was clear, before we ventured into the open ground, when again the snapping of dried wood and the rustling of dead leaves was heard.

"There's that dog of Dodd's again," said West; "I'll shoot him if I can get a chance; see if I don't."

"Nonsense, let the dog alone," said I; "you'll be getting us all taken, if you play the fool in that way."

"At that moment the moon shone out bright, just upon the spot where the noise came from, and glanced upon something white.

"It ain't no dog; it's a white rabbit," cried West; "we haven't got one white rabbit this evening; but I'll have this one, let who will say nay; so here goes."

"And though both Dick and I jumped forward to stop him, we were too late. Bang went the gun, and then we heard a noise in the bushes, and a gurgling, suffocating cry.

"Why, it's a hare you've shot, not a rabbit," said Dick; "don't you hear it cry like a child, as them hares always do? Come, look sharp and get it, Jim, and let's be off; we shall have them keepers upon us in no time: a great fool you was to fire."

"Jim West dashed into the bushes, and I caught a glimpse of a figure rushing towards the same spot from the field, for we were just at the edge of the wood. In another instant, shriek upon shriek filled the air. I ran to the spot from whence the sound proceeded, burst through the bushes, and there I beheld a sight enough to freeze my blood. It was dreadful! I reeled back and leant against a tree, for I thought I should have fallen. Jim West was standing opposite, his face convulsed with horror, his eyes fixed and his mouth open, but he neither moved nor spoke. On the ground lay his child, in the agonies of death; and leaning over the child, screaming and frantic with grief, was its MOTHER.

"I won't attempt to describe that scene; I could not if I would, for I was too terrified and bewildered to know or to mark what passed. All I know is, that the keepers surrounded us; they met with no resistance, and we were all taken; but I thought nothing of the poaching that night, nor for many another; the figure of that poor little

child, and the horror-struck faces of its father and mother, long haunted me, ay, and they do so still.

"This is a faithful and true account of that night's work. May Heaven forgive me my share in it."

"I hope so too," I involuntarily added, as I rose from my seat to throw a fresh log on the fire, and to light another cigar. "Poor fellow! poor West! no wonder he is what he is—dreadful, dreadful indeed! but how did Mrs. West and the child come there at all, I wonder?" I looked again at the manuscript; a small "T. O." was written at the bottom of the page. I turned over, and on the back of the sheet I found these few lines in a woman's hand:—

"Mrs. West having been informed that her husband was out poaching in Purrwood, and that the keepers were on the look-out there also, determined to try and save him from being taken. Not liking to go quite alone, she took her daughter with her. It is supposed that she left the child for a few moments, whilst she went further on to try and find West. The rest is known."

I need only add that poor Mrs. West never held up her head after that fearful night; she pined away slowly but surely, and died some years after of a broken heart, which was called "consumption" by the doctors. James West is still alive—alive in the body, but dead in the mind; his reason has left him.

"A sad tale indeed," I said, as I tied up the MS. with the rusty old shoe-string with which it had been secured; "and all this misery came from poaching! *only* poaching. Who can say, when he deliberately breaks the laws, how far he will go—where he will stop? Many a man has gone out a poacher, and come back a murderer."

THE STORY OF FOUNTAINS.

PART II.

It is to the reign of her enlightened king, Philip Augustus, (1180—1223,) that France traces the first public fountains which are on record. He led the aqueduct of St. Gervais into the interior of Paris, which first fed the ancient fountains of Saint Lazare and that of the "Filles-Dieu," and afterwards those of the "Innocents" and of the "Halles." Rouen in the middle ages owned as many as thirty fountains. As far back as the latter part of the sixteenth century, the celebrated Bernard Palissy, the great improver of the manufacture of china, discovered the means of forming an artificial fountain in almost any locality. He declares that it is only needful to select a soil which freely permits the infiltration of rain-water, the chosen spot having a gentle declination at one extremity. He then cuts a series of transverse trenches, and at a certain depth beneath the surface he carefully lays a firm bed of glazed tiles, which arrests the course of the water, and conducts it into a basin. Thus a pure jet of filtered water is secured, sufficient for the supply of a village. He recommends that a little grove of fruit-trees should be planted around the spot, in order that their branches might arrest

the vapour-laden winds, and that their own fertility might be economically secured. By supplying an impenetrable subsoil of glazed tiles, and thus rendering it possible to improvise a fountain in almost any thirsty spot, Palissy's ingenious mind worked more beneficently than when with such lifelong pains he modelled and baked his own beautiful cups and vases.

There was a remarkable book, first published at Frankfort in 1615, and reprinted at Paris in 1624, entitled, "The causes of making fountains with divers machines and many designs of grottoes and fountains." Its author, Salomon de Caus, was born in Normandy, towards the end of the previous century. He dedicates his work to the Electress Palatine Elizabeth. Much of his life seems to have been passed in foreign lands, in the character of an engineer and architect; and it is for Salomon de Caus that the French claim the merit of at least anticipating the discovery of the steam-engine. A drawing of what Salomon is pleased to call "Une fontaine rustique" is there given as a specimen of the state of French taste at that period. He himself says: "This fountain is suited to be placed in the middle of a garden; and you may also place therein a ball of copper which the water will elevate on high, and which will give great pleasure to the sight. The said fountain may be built partly of rustic stones, as the design demonstrates, which will be of small cost, if so be that the said stones be found conveniently on the spot, and in default of the said natural stones, one may cut them artificially."

To glance at England in the reign of Henry VI, we see that the citizens of London, in the year 1439, secured from the Abbot of Westminster the perpetual grant of a fountain in the manor of Paddington, with the power to break ground for the laying of pipes, for the annual rent of two pounds of pepper. The king, in confirming the grant, authorized the breaking up of any roads or ground belonging either to himself or to any private person. Permission was also given to impress into the public service such plumbers, masons, or other skilled workmen as might be required. Such was the style in which public works were carried on at that period. The splendid monastic foundations of our own and other lands, those beautiful abbeys and convents which always rooted themselves in such happy spots as were living with bursting springs or gently watered by quiet rivulets, availed themselves at an early period of the delicious luxury of fountains. Borrowing a fiction from the poetic mythology of Greece and of Rome, instead of placing a viewless nymph, an Egeria or an Arethusa, to preside over the fountain, they invoked the presence of some favourite saint; and thus, under the cover of a Christian name, virtually effected the apotheosis of the spring.

The Mahomedan, who is at least free from this kind of idolatry, places some such inscription as the following on a marble slab above the fountain, on whose florid arabesques he has lavished the best skill of his chisel: "As long as Allah causes a drop of rain to descend into its reservoir, the happy people who participate in its inestimable benefits shall waft praises of its virtue to that sky from whence it came

down." "This exquisite work is, before Allah, a deed of high merit, and indicates the piety of the Sultan Mahmoud." The Turks have a remarkable proverb, and it is full of meaning: "Do good, and throw it into the sea; and if the fish do not see it, Allah will." Some of the fountains which grace Constantinople are splendid erections, richly decorated with arabesques; but neither is the Pera fountain which refreshes the picturesque groups of an Eastern market-place, nor the beautiful one which charms the suburb of Galata, an object of so much attraction to the Turkish households as is the fountain of Guyuk Suy, in the famed "Valley of the Sweet Waters." This is the chosen scene of the Stamboul pic-nics. But where, amidst our quiet wood-walks or our cloud-tempered lakes, could we present such brilliant elements for the compositions of the artist, as crowd around the glittering marble fount of Guyuk Suy, under its double avenue of trees that cool the shining rim of the Bosphorus? To drink the "sweet water" is the pleasant fiction which brings all those bright-coloured holiday folk to the festal valley; which fills the little fleets of caïques that are dancing on the swell beyond; which makes the clumsy araba creak under its load of veiled beauties, who are looking out and laughing from under their awning of rich velvet; and which sends the slaves of the fruit-dealers hurrying in all directions with their silver cups and crystal vases. Constantinople has disputed with Rome the graceful name of the "City of Fountains," so delightfully do they abound in all directions. Every mosque is attended by one of these graceful handmaids, for ablutions form a vital part of a Turk's devotions. There is often an endowment which provides that attendants shall be always ready with cups full of cool clear water for the refreshment of passers-by. The supply itself is carried by subterranean water-courses from lake-like reservoirs in the forest of Belgrade, at ten or twelve miles distance. A curious machinery of hydraulic columns, placed at regular intervals along the way, triumphs over the inequalities of surface.

But it is underneath the city that the most extraordinary provision has been made, which, if properly kept in repair, would have made the inhabitants independent of supplies from without during the time of siege. There are vast cisterns excavated by the Greek emperors, the roof of which is supported by a multitude of pillars. This subterranean city of waters, which the Turks by an orientalism call "The place of a thousand and one pillars," has been so neglected that its alleys and colonnades are now dry; and not only may the traveller take a gloomy walk in these midnight streets, but he even finds that they have been chosen as workshops for some of the industrial trades. There is another grand excavation which is still partially filled with water—a "subterranean palace," to use the name by which the Turks describe it; but Dr. Walsh calls it more correctly "a subterraneous lake," extending beneath several streets of the city, with an arched roof reposing on 336 magnificent pillars of marble. Many people have been lost in attempting to navigate the watery halls and courts of this black palace of silence! but from the utter

sameness of the spot, pillar resembling pillar, alleys repeating themselves in drear perspective, and greedily swallowing the flicker of the dying torches, the bewildered mariner has never returned to the light of day.

To return to Europe: there is a most quaint fountain in the old city of Nuremberg. It is surmounted by a bronze figure of a peasant man carrying a goose under either arm, and each public-spirited bird vigorously spouts a jet of water from his long beak. The statue is by Peter Vischer, and goes by the name of the "Gansemann," (goose-man). A little episode in the Story of Fountains may here be recorded. In the sixteenth century, in the time of old Hans Holbein, the artisans of Basle were engaged in building a public arsenal. From day to day during the long hours of work, an old peasant used to come and play on his pipe the beautiful airs of his mountain-land. This continued until the undertaking was completed; and then the aged minstrel died. To perpetuate his tuneful memory, a statue representing himself and his pipe was placed on the top of a tall column which crowned the fountain; and thus the little spring of refreshment, whose musical cadences revived the spirits of the weary workmen three hundred years ago, still ministers on a larger scale to the refreshment of the tired and the thirsty.

But after all, it is in modern Rome, more than in any other city, that fountains form so very beautiful and sparkling a feature. The design is often extravagant, and the leading idea, graceful in itself, is often overlaid with encumbering ornament; but go to the Janiculum Hill and watch the grand rush of the waters in the "Fontana Paolina," from niches formed by the six columns of red granite from the ancient forum of Nerva, into their magnificent basin, and then turn to the fallen mistress of the world, sleeping beneath you amidst her ruins: or stand to see how the torrents leap over the piled rocks in the beautiful fountain of Trevi, and pardon Neptune and his tritons for their disturbing intrusion, if you can: or let your dazzled eyes watch the play of the noble fountains in the magnificent piazza of Saint Peter, especially when the flying spray blazes to the lamps on the great night of illumination, when the church decks itself from forehead to feet with its thousands of fiery jewels: mark these and many others in Rome, and you will not be disposed to dispute her claim to be named "the city of fountains."

This paper may be closed by a reference to a brilliant illustration of the universal law by which water struggles to attain its own level. A great aqueduct has been made to convey a whole river of water into the city of New York. This river, the Croton, called by the Indians "The Clear Water," is dammed up at its source, forty miles from the city, and forms there a vast reservoir amid its native hills and woods. A great water-course, built of squared stones, and mounted on piers of stone-work, traverses these forty intervening miles, now striding boldly across a valley, now penetrating a hill, and again stepping bravely over a river. The channel is covered over throughout its adventurous course, and it pours "a mile and a half of fine water" into

New York every hour. This is truly a Roman-like work; but now for the impromptu fountain. Just where the aqueduct steps across a valley, the engineer perforated the water-course by making an opening of about seven inches in diameter; and instantly there leaped up towards the sky a magnificent column of water, 115 feet high, forming perhaps the very grandest *jet d'eau* which has been ever beheld. The pillar of water spread itself out like a tree waved by the winds, and shivered itself into a thousand leaflets of diamond spray, shaking its glittering boughs amongst the quiet woods and the sleeping hills.

In this eager day, when everything is rapid, when life is so busy, when man is so swift of foot, and there is so little time for the languid luxury of repose, let the benefactors of their own species, and those who can spare a drop of sympathy even for the tired beast, give free course to their benevolent impulses and let water flow forth in the hot thoroughfares of our towns and cities. They have only to open the life-giving veins of nature, and let the world's wayfarers drink and be thankful.



GOOSE-MAN FOUNTAIN, NUREMBERG.

THE COST OF WAR.

A FAVOURITE argument of the American pro-slavery advocates, in defence of one of the privileges of their "peculiar institution"—viz., the legal right of the owner to cruelly ill-treat, torture, and maim his slave—is, that he will certainly abstain from so doing, not merely on the score of humanity, but of obvious self-interest. No man in his senses, say they, even although he be hard-hearted and indifferent to the infliction of suffering, will deprecate or destroy his own property; therefore, he will not injure or kill his slave, a valuable property. Now experience has long shown that this particular rea-

sioning is utterly fallacious. In numberless instances slave-owners have so injured their bondsmen by downright savage cruelty, as to very materially lessen their value as property, to their own manifest pecuniary loss. Yet more, examples are by no means infrequent of owners absolutely destroying, murdering their slaves, by whipping them to death or shooting them. Thus, facts show that self-interest will *not* alone prove an impregnable safeguard against the abuse of power—fury, revenge, or other passions nullifying its influence.

Just so is it, on a gigantic scale, between different countries. No one pretends to assert that war between two nations, tolerably equal in military power, can be anything else than excessively detrimental in its immediate and inevitable results to their several and mutual interests, insomuch that an immense amount of direct money loss in war expenditure is certain on both sides, without reckoning the indirect and incalculable loss from the suspension of commercial relations, the withdrawal of men from profitable peaceful avocations, and the *money-value* of the tens of thousands of killed and maimed soldiers. We have no mission here to enter on the abstract question of the sinfulness and folly of war *per se*, and we do not condemn those cases when war in self-defence becomes a virtue and a necessity. Our observations are restricted to wars which are clearly avoidable by mutual consent. Yet, during long centuries wars of this kind have from time to time been waged by nation against nation, and there is little prospect that it will be otherwise until a great change ensues in the nature of mankind. This too clearly proves that self-interest, and national interest, will *not* restrain men from incurring certain loss of money and of life.

Once more Europe rings with the din of a tremendous war. We do not intend to speculate on its objects and probabilities, but it will be interesting to gather some illustrations of the awful cost of that "game," concerning which Cowper long ago remarked—

" Were their subjects wise,
Kings would not play at."

Every country in Europe, we believe, (and many in other quarters of the globe,) have national debts, in nearly all instances of most serious amount, in proportion to their population and resources; and the origin of these national debts was almost invariably war; their gradual augmentation was caused by war; their perpetuity (humanly speaking) is solely attributable to war and warlike armaments. Everybody reads, from time to time, of new inventions and improvements in the "deadly art of war;" but it may not be so generally known that they are far more costly than the simple and less effective implements of destruction in use half a century ago. The various kinds of improved rifles cannot be supplied at the price of superannuated "Old Brown Bess"—the common flint musket of former days; and as an example of the vastly increased costliness of actual warfare, we may mention that, during the great conflict which terminated in the final overthrow of the first

Napoleon, solid shot was the missile almost invariably fired from cannon, whereas shells are now usually preferred, as being much more destructive. A 32lb. ball cost only 5s., but a 32lb. shell, filled ready for firing, costs 20s., and its charge of powder and wadding 12s.—in all 32s.! a 68lb. shell, powder, etc., costs 38s., and the guns to fire it (weighing each from three to five tons, in round numbers) cost £65 to £95 each. The "standing armies and navies" of Europe, even on what is droll enough called the "Peace Establishment," are on a prodigious scale. The following summary appeared lately in the newspapers; and although we cannot vouch for its perfect accuracy, we believe it may be accepted as tolerably correct. We must premise that it does not take into account the recent heavy increase of forces in several countries, to put their armaments on the footing of an armed neutrality, or, in other words, to be prepared for the possibility of being involved in actual war:—

FRANCE.—Army, 570,000 men, 169 field batteries; gendarmes, 25,572 men. Navy, 417 vessels, of which 300 are sailing vessels and 117 steamers; 27,000 sailors.

AUSTRIA.—Army, 670,477 men, of which 520,400 are infantry, 70,300 cavalry, 57,292 artillery, 11,116 engineers and staff, 9217 pontooners. Navy 104 vessels.

PRUSSIA.—Army, 525,000 men, of which 410,000 are of the active army and of the landwehr of 1st ban; 115,000 of the landwehr 2nd ban. Navy, 50 vessels, 3500 sailors.

ENGLAND.—Army, 223,000 men, including the colonial troops. Navy, 600 vessels, of which 300 are sailing ships, 251 steamers, 40 ships of the line, carrying 17,291 guns and 69,500 sailors.

RUSSIA.—Army, 1,067,600 men, including the reserve, besides 226,000 irregular troops. Navy, 177 vessels, 62,000 sailors and gunners.

TURKEY.—Army, 179,000 men; reserve, 148,680; irregular troops, 61,000; various contingents, 110,000; total, 319,680. Navy, 70 vessels, 38,000 sailors and gunners.

SPAIN.—Army, 75,000 men; militia and reserves, 500,000 men. Navy, 410 vessels, 15,000 sailors.

SARDINIA.—Army, 50,000 men. Navy, 10 vessels, 2860 sailors.

TWO SICILIES.—Army, 110,000 men, of which 10,000 are Swiss. Navy, 20 vessels, of which 32 are sailing ships and 23 steamers; 100 gunboats; 6360 sailors.

MODENA.—Army, 3500 men.

PARMA.—Army, 2802 men.

ROME.—10,000 infantry; 1315 cavalry.

TUSCANY.—Army, 16,000 men. Navy, 126 vessels.

DENMARK.—Army, 60,000 men. Navy, 128 vessels.

SWEDEN AND NORWAY.—Army of Sweden, 144,000 men; army of Norway, 24,000. Navy, 349 vessels and 126 gunboats.

PORTUGAL.—Army, 35,000 men, including colonial troops. Navy, 44 vessels.

HOLLAND.—Army, 58,617 men. Navy, 72 vessels, 58 gunboats, 7000 sailors.

BELGIUM.—Army, on peace footing, 31,400 infantry, and 7322 cavalry; war footing, 81,000 infantry, and 14,000 cavalry. Navy, 1 brig of 20 guns, 1 schooner of 10 guns, and 2 gunboats.

SWITZERLAND.—Army, 125,000 men; including reserves, landwehr, 150,000 men.

GREECE.—Army, 10,000 men. Navy, 25 vessels.

GERMAN STATES.—Federal army, 250,000 men.

GERMANIC CONFEDERATION.—Army, 525,000 men, besides 49,500 cavalry, including the contingents of Austria and Prussia.

Millions of men, and thousands of ships, kept in constant preparation for war! Fifteen per cent. of the adult male population of Europe are said to be required to supply the complements of standing armies and navies; and what a terrible comment on the spirit of this boasted era of civilization is the single portentous fact, that the newly completed naval arsenal of Cherbourg, in France, has cost, from first to last, (on the able authority of the "Revue des Deux Mondes,") the astounding sum of £7,611,000 sterling!

As regards the comparative cost of standing armies of various countries, (*in time of peace only*), a Belgian paper asserts that "the soldier costs annually each inhabitant of England, 12s. 6d.; France, 10s. 10d.; Austria, 6s. 5½d.; Prussia, 5s. 5½d.;" and that "the maintenance of their armies, in time of peace, costs the countries of Europe, annually, £73,313,750, and the fleets, £17,687,500—total, £91,011,250!" If that represents *peace*, what amount would represent the annual cost of a general European *war*? We are aghast at the idea.

The expense of the two greatest navies in the world, during the last seven years, is stated (on English official authority) to be, for England, £53,179,000; and for France, £38,935,000.

What the warfare of a century and a half has cost our own country, in the shape of a national debt, unparalleled in magnitude throughout the world, every direct tax-payer knows, and every indirect tax-payer at least ought to have some idea. We cease to marvel at this debt, when we learn the cost to England of the great wars only which occurred during the period in question. We have before us two calculations of the cost of these wars, and they do not very materially differ, except in the alleged cost of the war against Napoleon I. We take the estimate which, owing to the abovementioned difference, is by far the lowest, and we find that the war occasioned by the Revolution of 1688, "to establish William and to humble France," cost £31,000,000; the war of the Spanish succession, "to deprive Philip of the crown of Spain and to humble the Bourbons," £14,000,000; the Spanish war (1739) and Austrian succession, a "quarrel about Campeachy and the crown of Hungary, commonly called the Logwood war," £47,000,000; the seven years' war (1756) about Nova Scotia, etc., £107,000,000; the American war, resulting in the independence of the United States, £151,000,000; the war of the French Revolution, a protest against Republicanism, "to repress anti-monarchical principles in France and the rest of Europe," £472,000,000; the war against Buonaparte, "to restrain the ambition of Napoleon, and restore the Bourbons," £586,000,000.

The ablest statistical writers—the men most competent to form a practical judgment on money value in any shape, and to authoritatively state the national loss or gain from any given problem—would despair to calculate the positive loss incurred by any country by the employment of hundreds of thousands of fine young men in warfare or preparation for warfare, in lieu of devoting themselves to industrial pursuits. And then, the positive, irreparable loss to the nation by death or maiming! Every man killed or disabled in war requires another man to supply his place—and that, in turn, creates a fresh vacuum in the lists of productive labour. At the conclusion of the late Russian war, the following statement of our losses in men appeared in the public journals:—"England, since the commencement of the war, has lost 19,584 gallant men by death in action, wounds, and disease; and 2873 have been besides discharged from the service on account of the two latter causes. England has sealed her de-

claration of unflinching devotion to the cause of national independence by the sacrifice of 22,457 gallant soldiers. Of these, 1993 fell bravely in action, about 1621 sunk under their wounds, 4279 died of cholera, and 11,451 of other diseases. The losses of the French, as far as they have been ascertained, amount to 60,000. Count Orloff admitted in Paris, that the Russian loss has not been less than 500,000. The loss sustained by the Sardinians has not been, and the loss sustained by the Turks never will be, ascertained."

That very war cost England alone, according to careful calculations, the sum of one hundred millions sterling! What might, or rather what might *not*, have been done for our noble old Christian island by a proper application of such an enormous amount? We copy here one estimate showing how the hundred millions *might* have been expended:—

We might have provided—

1000 British School-rooms	at £1,000 each	£1,000,000
1000 National ditto	1,000 "	1,000,000
1000 Infant ditto	1,000 "	1,000,000
A National Gallery for the Fine Arts	—	2,000,000
100 Schools of Design	10,000 "	1,000,000
20 Reformatory Schools	50,000 "	1,000,000
100 Homes for Governesses	10,000 "	1,000,000
100 Playgrounds and Gymnasiums	10,000 "	1,000,000
200 Mechanics' Institutes	5,000 "	1,000,000
100 Public Libraries	10,000 "	1,000,000
100 Baths and Washhouses	10,000 "	1,000,000
1000 Temperance Halls	1,000 "	1,000,000
20 Asylums for the Blind	50,000 "	1,000,000
20 Ditto for the Deaf and Dumb	50,000 "	1,000,000
20 Public Parks at £500,000, each Park 5000 acres, at £100 per acre	—	10,000,000
Drainage and Sanitary Improvements	—	5,000,000
Medical attendance of the Poor	—	3,000,000
20 Penitentiaries for Females	60,000 "	1,000,000
100 Refuges for Prisoners	10,000 "	1,000,000
1000 Soup Kitchens	1,000 "	1,000,000
100 Sets of Almshouses	10,000 "	1,000,000
10 Public Hospitals	200,000 "	2,000,000
10 Hospitals for Consumption	100,000 "	1,000,000
20 Fever Hospitals	50,000 "	1,000,000
20 Ophthalmic Hospitals	50,000 "	1,000,000
100 Floating Hospitals for Sailors	10,000 "	1,000,000
100 Hospitals for Drunkards	10,000 "	1,000,000
100 Hospitals for Lying-in	10,000 "	1,000,000
10 Sea-bathing Infirmarys	100,000 "	1,000,000
A Fleet of 2000 Fishing boats	500 "	1,000,000
2000 Sets of Nets	500 "	1,000,000
2000 Life Boats	500 "	1,000,000
20 Orphan Asylums	50,000 "	1,000,000

All this would have cost just half the sum £59,000,000

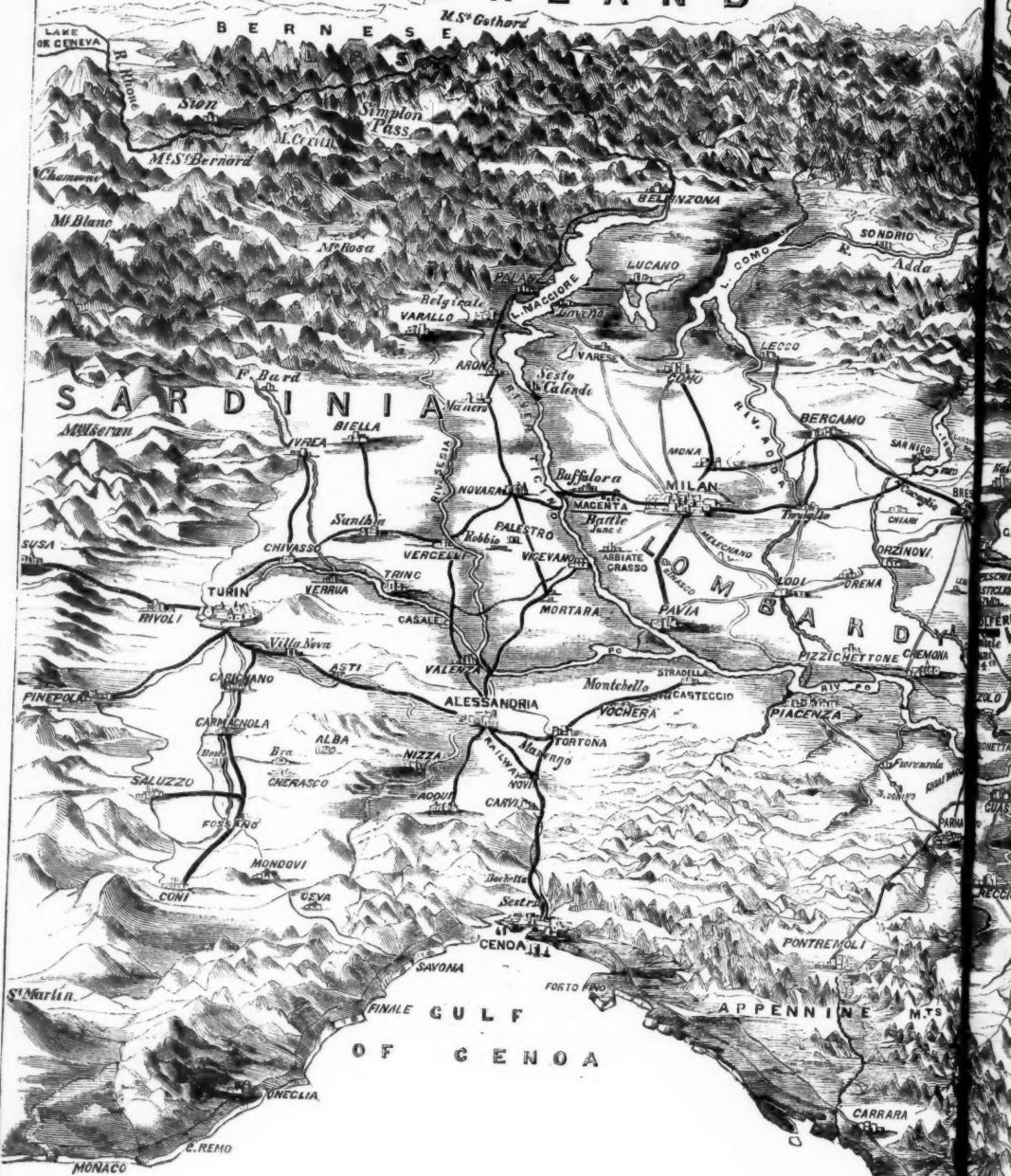
Let us therefore proceed; we might, further, have provided—

2000 Churches and Chapels, at average cost of £5000	£10,000,000
2000 Ministers' Incomes of £500 a year, for 10 years	10,000,000
4000 Schoolmasters' Salaries of £250, for 10 years	10,000,000
City Mission and other Home Missionary objects	5,000,000
Foreign Missions, including Continental and Colonial	5,000,000
Bible Society	1,000,000
Religious Tract Society	1,000,000
Ragged School Union	1,000,000

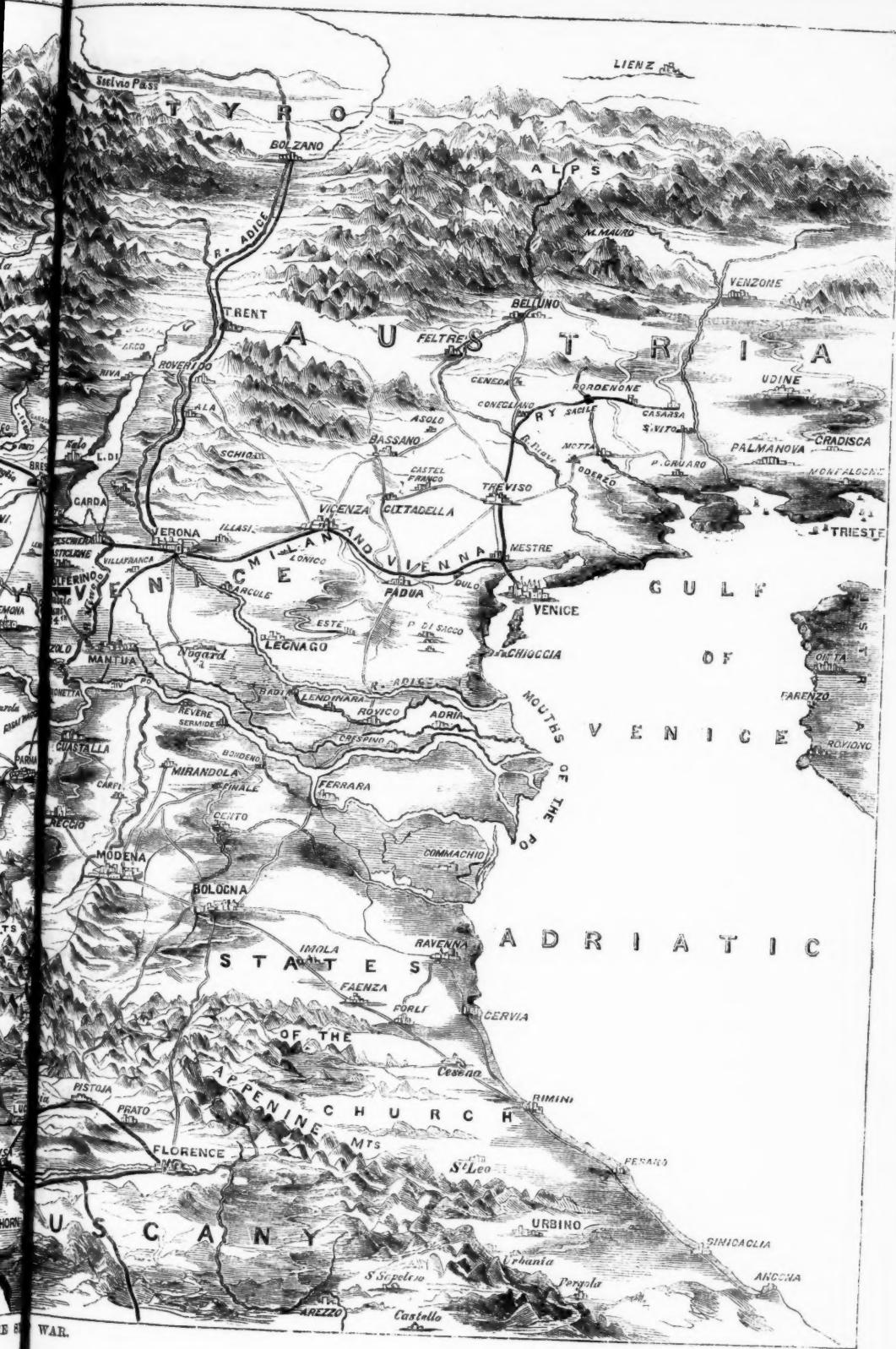
Leaving still seven millions sterling available for other objects of usefulness or benevolence. The items of course may be varied according to the taste and sympathies of the reader.

Hitherto we have considered only the sordid cost of war—the "of the earth, earthly" point of view; but think of the sin and sorrow, the misery, the distress, the woe and wailing, the broken hearts offered up thereby on the altar of the spirit of mutual destructiveness! "Whence come wars and fightings among you? come they not hence, even of your lusts that war in your members?"

SWITZERLAND



M E D I T E R R A N E A N



THE GARDEN.

CHAPTER IV.—THE IN-DOOR GARDEN.

A TRAVELLER in Russia, writing twenty years ago, describes with enthusiasm the ingenious arrangements by which the Russian gentry secure for themselves the pleasures of a garden within the walls of their own dwelling. The gardens out of doors in that country are for the most part magnificent failures; nearly all the flowers they exhibit are grown in pots, and most of them are importations from a southern soil. The climate, indeed, will hardly allow of anything else; it is only during the few short months of summer that garden plants would bear exposure, and they must be preserved in hot-houses during the long winter, if they are to survive for another season. But within-doors the case is different; there, an approach to a medium temperature may be maintained the whole year through, and plants and flowers preserved in a flourishing state. The usual practice is to fence off a portion of the drawing-room or saloon, near the light, with a neat, almost invisible trellis work, over which ivy is carefully trained and allowed to luxuriate. The inclosure thus formed becomes a kind of leafy boudoir; it is large enough for the reception of the stands containing the flowering plants and shrubs, which are of the rarest and most beautiful sorts that can be obtained; and further, it will hold a sofa, a table, and a few seats. During the violent heats of summer, when the days are so long that an hour of twilight stands in the place of night, such a place must be a blissful retreat, and at all seasons it must add immensely to the comforts and amenities of a dwelling which has no garden attached out of doors. The Russians are, further, in the habit of peopling these in-door gardens with singing birds in cages. The songsters are, the majority of them, canaries bred for this especial purpose in Germany, and annually exported to St. Petersburg. They form a regular article of merchandise, and are sometimes the sole freight of a Dutch vessel, a prodigious number of them being wanted to meet the annual demand. Not one in a hundred of them survives through a Russian winter, whatever amount of care be bestowed upon them. The poor little exiles sing gaily for two or three months, sicken at the first fall of snow, and pining under the gloom of that sunless sky, die by tens of thousands before Christmas—a cruel destiny, it seems to us, but badly compensated by the impetus it gives to the trade of the German breeders.

The traveller who made the above report expressed a wish to see the example set by the Russians followed by other nations. Since his work was published, the practice has been largely taken up both by the Germans and the French, and a saloon or drawing-room garden, differing only in details from the above description, is now not uncommon among the upper classes of both these nations. With us the feeling that gave rise to such an arrangement is centuries old; from time immemorial we have had our in-door gardens in one shape or other, though never in the shape pec-

uliar to Russia. Our usual plan is to connect a conservatory with the drawing-room, from which it may be divided by glass doors, or, as is sometimes the case, by an invisible wall of solid crystal. The most exquisite example of this kind we ever saw was to be found at the seat of the Earl of Jersey, at Middleton. There the visitor was shown into a handsomely furnished sitting-room, one wall of which was formed of a single plate of glass, so clear and spotless that, unless he were warned of its existence, he would be likely to walk through it: on the other side of the glass wall the rarest plants and flowers were ranged round a central fountain, by the side of which, and reflected in the water, was placed the original, in purest marble, of Bailey's celebrated statue of Eve bending over the flood. It is some years since we saw this startling vision of beauty, but we believe it yet remains undisturbed.

We have already adverted to the practice of modern builders in London, who, by adding a conservatory to all the new houses they now erect, recognise the growing predilection for the flower-garden. These conservatories are, in average houses, little larger than mere closets, but small as they are, they often serve to attach a new interest to domestic pursuits, and it is really astonishing to note how much may be done with them by good management and in good hands. The whole art and mystery of floriculture is often practised upon an area of ten feet square; the most delicate plants are raised and propagated from year to year, and specimens of rare flowers are produced only second to the finest productions of the professors of the art. On the other hand, it is to be regretted that numbers of these so-called conservatories conserve only rubbish, being used by their proprietors as mere lumber-rooms for the stowage of anything which it is convenient to cast out of sight; for the garden instinct, prevalent though it be, is not universal.

We believe that the rule would be found to hold good, that the lower classes in our great cities have more affection for the garden and its floral produce than the class immediately above them. Perhaps the money-making habit is not favourable to the cultivation of simple tastes and the love of (in a pecuniary sense) the unprofitably beautiful. However that may be, we know it is a fact that in many a trading house of no mean pretensions the in-door garden is confined to the basement floor, and the flowers and greenery which are ignored and banished from the parlour and the drawing-room, will take refuge in the kitchen; the conservatory may be stored with old boxes and packing-cases, but Betty has a box of fragrant mignonette in the scullery window, and a bouncing geranium outside the sill of her bed-room.

But if some are indifferent to the in-door garden, others are altogether as solicitous, as careful against disaster, and as proud of success. It is interesting to note the manifestation of these latter feelings in one's walks about the metropolis. There are certain districts where, although there be no garden-ground, the domestic garden not only exists but flourishes; and in these districts there are

generally one or two houses more noted than the rest for the beauty of their floral display. The probability is, that they have inoculated their neighbours with a love of flowers and an innocent spirit of rivalry, and that it is to them the public are obliged for the delicious and refreshing exhibitions of the parlour windows in those localities. We could particularise many such houses which confront us in our occasional walks, and to whose occupiers we always feel grateful as we pause for a momentary look: in one there has been for years past a magnificent campanula filling the entire window, the bare sight of which is worth a day's march; in another a blossoming myrtle, framed in a solid wall of vari-coloured geraniums, fills up the space of a blind; and in a third, a graceful arum rises centrally behind a screen of delicate primulas and monthly roses. One such treat, which a dozen years ago used to greet us on our morning round, still exists; this is a garden that lasts all the year, save in the coldest winter months, and which displays its sweets in the window-sills of a house in — Inn, the chambers of a lawyer and a magistrate. Here the sequence of flowers comes in with the crocuses in February, and only goes out with the chrysanthemums in November, and during the whole season they are the finest, the choicest, the most exquisite in colour, and invariably in healthy thriving condition.

The garden under difficulties presents a rather curious and interesting phenomenon. There are some men who cannot live anywhere without an attempt at least at a garden. Like Silvio Pellico in his prison, if they can grow nothing else they will grow a weed, and watch and tend that with all the interest of a man engaged in a grand undertaking. Of the garden under difficulties London presents examples manifold: the only garden-ground of a large section of the labouring population is the sill outside the window, the stone flags of the area, or the roof of the house; all these you may see undergoing cultivation without wasting much time in the search. If the cultivator cannot raise flowers—if he want means to buy them, or proper soil to grow them—he will console himself by growing something green in their place; if, in the long box which serves instead of a row of pots, he cannot grow the sweet-pea, the convolvulus, or the mignonette, he will try mustard-and-cress, or even the scarlet runner, which latter he will allow to insinuate itself into his chamber through some crevice, and thus cheat himself, while he bends over his labour, with the illusion of an imaginary garden outside. Sometimes he brings home a root of ivy from the fields, and plants it in the crack between the flags and the bricks at his front door: sometimes it is a crop of wild hops which he raises in a superannuated tub, and which, by the time that autumn is approaching, you shall see shutting out half the daylight from his window by its superabundant growth. Then he will make all sorts of experiments, watching the result from day to day as he sits at his loom, or his last; he raises orange plants and apple trees from the pips of the fruit; he rears young oaks from acorns, and young beeches from beech-mast; he turns plants upside

down in a glass bottle, and looks for the transformation of roots into leaves, and *vice versa*; he suspends seeds in water to mark the method of germination; in short, he tries all sorts of possible and impossible things, to get a little nearer, if it may be, to the mystery that so puzzles and pleases his imagination.

The in-door garden is a very profitable institution for seeds-men and floriculturists, and they maintain a careful and constant provision for the demands it makes upon them. The capital annually invested in plants and bulbs destined to bloom indoors, in London alone, would amount to an enormous sum. Two or three guineas the dozen is nothing extraordinary for bulbs for a West End drawing-room, and it is thither that the finest floral specimens reared by the market-gardeners in the neighbourhood of the metropolis ultimately find their way. It is the taste of the rich and noble for these exquisite creations which is the originating cause and prime mover of the grand horticultural shows that periodically take place throughout the country. Every exhibitor hopes by the display of some new flower, or some splendid variety of plants already known, to attract the attention of the wealthy amateur, and if he can succeed in doing so, he is sure of a handsome reward.

A valuable addition has of late years been made to the in-door garden by the introduction of air-tight glass-cases: these may be of any chosen shape or size, from that of a large cabinet to a single bell-glass. The air may be admitted at pleasure at any temperature, and thus plants which would otherwise fade and die in the winter months may be kept alive throughout the year. They are mostly used at present, so far as our observation extends, for the growing of various kinds of ferns, those of the most delicate and picturesque forms being generally selected; but there is no reason why they should not contain flowers, of which those growing wild in the fields would supply materials for an appropriate and interesting selection.

Many persons who keep in-door gardens are in the habit of complaining that their plants die in the winter, and have to be replaced by new ones in the spring. This is the result of their own carelessness and neglect, and there ought to be no foundation for such a complaint; on the contrary, they should have plants in plenty, and to spare, as spring comes round. The herbaceous plants should be cut down in autumn, and the cuttings, after a day's soaking in water, stuck into large pots close to the edge all round: if stuck in the middle they will be less likely to take root; sand should be freely mixed with the mould. When they have taken firm root, they should be re-planted singly in very small pots, and shifted into larger as they grow strong and stout. They should not be encouraged to grow much in the winter, and may therefore be kept with little moisture and away from strong light; when watered, care should be taken not to chill them, and water slightly warmed should be used. A frequent cause of destruction to plants is rotting the roots with too much water; this often arises from the use of saucers under the

pots, by which the water is prevented from draining away when too much has been applied.

Plants which pass their lives in-doors exist under conditions very different from those of their natural localities. This is the principal reason why so many of them, though they do not die, cease to be ornamental and worth preserving: sometimes they refuse to flower after a certain period, and yield nothing but leaves; the cure in this case is to distress the plant: it is leading too fat and lazy a life to be fruitful; cut it down, therefore, in size, lop its roots as well, and give them less room to expand, and it will soon flower again. Sometimes a plant runs wild and straggles upwards in an ungainly way: this may arise from too fast a growth under stimulating manures, or from a frequent change of position in regard to the light. A plant constantly changing its position, if it flower at all, will flower but feebly. Sometimes plants which have stood the winter well, will droop and decline in the warm weather of spring; this often arises from checked perspiration; the winds and invigorating showers of the season have not reached them, and they suffer accordingly; in this case they may be restored to health by a course of shampooing; their leaves should be washed with soft water, by means of an old shaving-brush or a sponge, until they are perfectly clean and the water comes away colourless. There is no process which has so magical an effect upon a sickly plant as this; it will often restore a patient that seemed about to perish, to a state of vigorous health in the course of a few days.

In concluding these short chapters on the garden, we may be allowed to revert to the garden which every man has in himself—the soil being his own heart, intellect, and affections. Of all soils this is the most prolific: it has no barren or unproductive seasons; it must and will produce something, and that constantly—if not flowers and fruit, then rank weeds and poisonous fungi. Here is a garden-ground which none of us can neglect with impunity, and which, on the other hand, is never ungrateful under careful and conscientious cultivation. May we all strive wisely to make the best of it, each according to his opportunities, leaving the result to the Giver of all good.

WANDERING MUNTEBANKS.

At all public spectacles, the spectators are to me themselves the greatest show. As Pope has it, translating Horace's allusion to the Roman sports—

"Let bear or elephant be e'er so white,
The people, sure the people, are the sight."

Finding myself lately at a great gathering of the people, (whether in the capacity of artist, or newspaper reporter, or police detective on duty, it is not necessary to explain,) I determined not to lose the opportunity of learning how some of the more needy of the mixed multitude there assembled, endeavoured to gain a scanty living, and transfer a few coins from the pockets of their richer fellows to their own. Such gatherings seem to be the assembling point of all the peripatetic performers for a hundred miles round; real vagabonds some of them; honest

kindly folks others; but all anxious to make a harvest. I was gazing on the crowd, when I was startled by a sudden and most hideous noise at my shoulder. Turning quickly round, I beheld a man with an enormous shock of wool-like hair, stuck out from his head like a New Mexican savage, who, holding his nose with his fingers, was producing, with marvellous intonation, the most unmusical bray of a donkey; he must have practised it for years, for it was louder and more discordant than the real donkey's voice, and the prolonged screech at the end caused many bystanders to put their hands to their ears in sheer despair.

Then a pale-looking man, with his hair cut quite short, and clad in a tight-fitting jersey, which seemed quite wet through, deposited by the door of the drag a washing-tub nearly half full of water. I could not imagine what he was going to do, till he threw into the tub a small coin, meant as a decoy for other contributions, and, pulling his short hair, said, "American diver, if you please." By dint of practice, he had acquired skill in fishing coins up with his lips, a performance not interesting to see, and anything but conducive to the longevity of the diver, whose head was sometimes submerged a painfully long time.

Next came a man, grim, dirty, and stupid, carrying a model of a coal mine, and a placard on his hat, stating that he had been blown up by fire-damp and had been disabled for future active work; the coal mine was a little the worse for wear, and well polished at the corners, showing that he had lugged it about many a hundred miles in search of coppers, and here and there a stray bit of silver.

Following him came a man with an electric machine, and he gave shocks at the rate of a penny a shock, or three shocks for twopence; he did not get many customers at the latter tariff, but one pocket of his old tail coat seemed pretty heavy with subscriptions to this scientific experimental philosopher.

"I will give you one shilling if you will depart," exclaimed a good-looking Italian gentleman, from the top of a barouche to three musical sisters from the Rhine provinces, who, with their organ, tambour, accordion, and three cracked voices, sang broken English out of all time and tune, evidently jarring the sensitive nerves of the Italian. No sooner were they gone than two other musicians, one with a harp, the other with a guitar, occupied the places left vacant by the Germans, and very beautifully and very melodiously did they play some favourite airs of their own sunny land.

Bang! what's that? surely revolvers are not allowed to be fired in this crowd; there is the smoke, too, behind yonder carriage; there is no commotion, but I certainly heard a pistol go off. I will go and see what it was. Ah, master Jacko, it's you, is it? you too have come down, fiddle, bell, sword, musket, and all—from London. Little you care for sight-seeing; you are tired already, and I see you don't seem anxious to fire the gun again, and your sham fight with your master, as you hop round and round your board, is not so energetic as I have seen it!

"The fire-eater, or the celebrated living salamander," growled out a deep voice close under the wheel of the drag, while I was speaking to a friend. "Light up, Jim," said the wild-looking owner of the voice aforesaid. Jim forthwith put a tin penny plate on the ground, and, pulling some dirty tow out of one pocket, and some powdered resin out of the other, placed them both on the plate, and lighted them up according to orders. The living salamander coolly began cutting up his smoking and indigestible meal with a knife and fork, and, when sufficiently comminuted, ate it all up bit by bit, hot, blazing, and emitting fumes of resin! Why he did not burn his lips and mouth I know not, and where he stowed it all away I am amazed to understand; certain it is, he spit none of it out again in my presence; he must have a pouch like a Pelican somewhere in his throat, for immediately after his fiery meal he devoured a hatful of shreds of paper, and then, making sundry grimaces, pulled out of his mouth a long roll of parti-coloured paper a yard and a half long, coiled up in a beautiful tapering cone.

What an apparition! surely it is a ghost making its way towards me among the wheels of the carriages. Not a word or a sound does it utter, and how carefully it glides along. Poor ghost, you must indeed be hungry, to allow your body to be converted into a walking advertisement. The ambitious card engraver who hired you deserves some credit for the pattern of your coat; cunning man was he who thought of clothing you in a long sleeveless garment, and sewing the business and visiting cards of his customers on to it, so that you look like a mountain of white, green, and other divers coloured cards. Your head may have but little brains inside; but anyhow the outside affords a fixed point whereon to fasten a huge card-board cocked hat, with a card weather-cock upon it bearing the name of your employer the card engraver, (whose name, notwithstanding all the trouble he has taken to impress it upon me, I forgot). Poor ghost, we hope you are well paid for your labour!

A stout acrobat, dressed in dirty cotton garments, is now clearing a circle, by means of flourishing a ball of some soft material at the end of a rope round and round his head, causing the spectators to clear off. I will go and see the performance. "The infant Hercules," a man six feet high, and with limbs like a giant, advances with would-be grace into the centre, and kisses his great red hand to the crowd, particularly to the occupiers of the booth opposite which he has chosen his arena. His pale, half-starved looking wife brings him a cup and a heavy metal ball; he ties the cup on to his forehead, and then, jerking the ball high up into the air, catches it in the cup. The ball enters with a thud; the man staggers a little; never mind; he would not do it if it hurt him. He then takes two cannon balls, the size of small dutch cheeses, out of his sack, and tosses them about as if they were made of elder pith; he makes them run up his arm to his ear, round behind his head and down the other arm and back again; he causes them to jump up, by simply straightening his elbow joint; he dances them on his feet while he lays on his back, and seems to delight in making

them do everything that is contrary to the laws of gravity; there is no sham about it, for the cannon balls are handed round for examination, while the poor wife collects contributions in an old theatrical cap with a dingy feather in it. After turning his body into sundry positions, which one would have thought possible only for a man made of India rubber to do, a foolish and repulsive trick with a needle next followed. Being invited to see that there was no deception, I satisfied myself on that point, and afterwards asked the man how he could practise so dangerous an experiment.

He told me he had done this trick nearly twelve years, and that he learnt it from a Dutchman. I warned him of the danger. "He knew that," he said, but "he had a wife and family to support."

"Here you can see through deal board for one penny," exclaimed a respectable elderly man in spectacles. I pay the money, and looking into a tube like the eye-glass of a microscope, fixed into a little square wooden box, see people moving on the other side of the box, although most assuredly there is a thick board in the middle of the box between them and me. How this is done I know not, but I like to be puzzled for a penny.

Among the crowd I see a man approaching with the most extraordinary nose. At the distance it looks natural, but as he comes near I see that he has affixed on to his John Bull looking face an artificial nose, which adds not to his beauty. Where did he get his nose? Ah! here comes the nose merchant with a sackful of pasteboard noses; and for a penny you can on the spot become flat-nosed, Roman-nosed, snub-nosed, or turn-up-nosed, according to your fancy. The noses seem to take well, and the sack empties rapidly, though he did not get many customers among the "female" portion of the crowd, as may be readily imagined, for the noses were certainly not "becoming," if that is the right term. Amid the din of the grinding organs, I hear a musical sound unknown to my ears, and find that it proceeds from an instrument consisting of piano wires tightly stretched on a triangular board; the player has a thin stick in each hand, with which he strikes the wires, producing melodious and musical notes, which might be pretty in a drawing-room, but which are quite drowned amid the thousand sounds of more obtrusive instruments and the hum of human voices. The poor man looks disheartened, his instrument does not take; and I fear me the performer on the musical glasses does not fare any better; the tips of his fingers, I see, are hard and horny, from perpetually playing. The literary world, too, has its representatives; a shower of square bits of very thin paper comes floating along in the wind. I snatch at one as it passes by, and find it to be an advertisement of a penny newspaper.

The spectacle of the day is over; the policemen leave the crowd to take care of itself; the London folk think about going home; this is the harvest time for the men who ask you to "ring the bull." The bull consists of a flat board, with six or seven iron rods placed upright in it; eight plain iron rings are placed in the player's hand, and all he has to do is to throw the rings on to the rods. "Like this; like this, sir," said the owner of the bull, as

he throws the rings upon the rods. Nothing seems more simple; you pay a shilling for the eight rings, (which shilling you get back, if you put one ring on,) and you try; the rings will go everywhere but on the rods; you get exasperated at being unable to "ring the bull;" the proprietor encourages your exasperation, and pockets his shillings pretty fast.

Now, too, since they acquired notoriety through some police trials, spring up "Aunt Sallys" innumerable. They seem larger, more hideous, and more patronized than ever. A block of wood, somewhat resembling a human face, has a bonnet put on it, and a common tobacco pipe put in for a nose. The game is to break this nose by throwing a heavy stick at it; this too seems easy to do; but even though "Aunt Sally" keeps her nose quite still, it is very difficult to hit it with the missile.

The wine and beer bottles by this time being pretty empty, the company is besieged by numerous applicants for them. "If you can't give me a copper, give me a bottle," moans out the poor blind man. "Don't throw it away, sir, give it me," exclaims a little bright-eyed gipsy girl, as we empty the last drop of sherry into the wine-glass; she gets the bottle, squints into it with one eye, then, holding it upright in her mouth, endeavours to catch the few drops of wine yet remaining, and off she rushes to her bottle store. I visit it with her, and find it in charge of her grandmother, who has sent out the whole family bottle hunting. The old dame has already a mountain of glass by her side, worth several shillings if sold in a lump.

But the horses are being put together, and I must be off back to a comfortable home. Alas! how many of the poor creatures whose performances I have been witnessing, have no home but the hedge-row and the barn-floor; no house but the public-house and the workhouse; they work hard for their daily bread. Call them not *all* knaves and vagabonds; many an honest heart is covered with rags, many a noble-minded father is struggling for food for his family, hatless and shoeless. Spurn not the poor mountebank, nor the wandering showman, misdirected as their skill may be; you know not their sad story. If fortune has smiled on you, frown not on your fellow creatures who invent ingenious and often strange modes of earning a scanty subsistence; rather aid those who are labouring for the social amelioration of this vagrant class.*

VAUCANSON'S AUTOMATA.

THE most remarkable contriver of automata, or self-acting mechanical engines, was Jacques Vaucanson, of whose life an account is given in a recent volume by Miss Brightwell.†

He was born at Grenoble, in the year 1709. Of his father nothing is known; but his mother, who had the care of his education, made him her constant companion, and the boy accompanied her in the visits she paid to her female friends, especially

* Those who wish to know more about the habits of these vagrant classes, will find some curious details in the City Mission Reports, about nine years ago.

† "Heroes of the Laboratory and Workshop." London: Routledge & Co.

on Sundays and *fête* days. On these occasions little Jack was left to his own resources for amusement, while the good dames conversed together; and it so chanced that, in one house he was occasionally taken to, there was a crack in a partition wall, which the urchin spying, began to peep through. He found, as he did so, that he could see part of the mechanism of a clock, which hung on the adjoining wall. With curious eyes he watched its movements, of which a portion only was visible to him. It was the first time he had ever thought about the subject; but now his attention was attracted, and he resolved he would make himself master of the whole contrivance and ordering of the clockwork. The next time he went there, he took with him a pencil, and occupied himself in drawing as much as he could see of the springs; and in this manner he succeeded in understanding their plan. At length, all at once, he caught the idea of the escapement movement, and before long he contrived, with some pieces of wood and some rough tools, to make a clock, which kept time pretty correctly. His natural genius had thus discovered itself, and he was thenceforward a mechanician, heart and soul devoted to the study of that which he resolved should be his calling in life.

His childish efforts were employed in constructing a baby-house chapel, for which he made little angels that flapped their wings, and some figures dressed as priests, which moved slowly.

He was still but a youth when, chancing to go to Lyons, he heard that a meeting was about to be held for the discussion of a plan for supplying the whole town with water by means of a hydraulic machine. The idea attracted his attention, and he instantly set to work to construct such a machine, and actually succeeded in his purpose; but timidity prevented him from presenting it for approval. Being at Paris some time after, he was filled with surprise and delight to find that the plan of the machine, called there the *Samaritaine*, was precisely the same as that he had invented at Lyons. This convinced him of his powers, and inspired him with the courage in which he was naturally deficient. He now gave himself up with great diligence to the study of anatomy, music, and mechanics, and for some years occupied himself in this manner.

The flute-player of the Tuilleries gave him the idea of constructing a similar work; but he was prevented from undertaking it in consequence of the reproaches of his uncle, who thought it a waste of time; and it was not accomplished until, being laid aside by a long illness, he employed the weary hours of his convalescence in that manner. He succeeded to admiration, and made a small figure, which played the flute with astonishing precision. Some time after he exhibited a tambourine player; two geese, which dabbled on the ground, looked for corn, and picking it out of a trough, swallowed it. Vaucanson also discovered a means of imitating the animal digestion in a remarkable manner.

In 1740 the King of Prussia, who endeavoured to attach remarkable men to his court, made offers to Vaucanson who, however, preferred remaining in his own country.

Not long after, Cardinal Fleury engaged his

services, intrusting to him the inspection of silk manufactures. He had now a field for the useful employment of his great skill in mechanics in this situation, which he had not sought, but which he owed entirely to the superiority of his talents, perfected by self-culture and long persevering study. His efforts in this department were crowned with success. He brought to perfection an improved method of preparing silk, and constructed various machines, remarkable for the uniformity and precision of their movements, and the consequent regularity of their operation. Of this machinery he gave, in the Record of the Academy of Sciences, of which he was a member, ample and excellent accounts. He possessed in a very rare degree the talent of describing machinery with clearness and precision. He had the gift of perspicacity; he could see with a glance, and describe with equal readiness.

So much importance was attached to these labours, that the jealousy of the ignorant operatives was awakened; and on one occasion, during a journey to Lyons, Vaucanson was pursued and pelted with stones by an angry mob, who threatened to kill him for diminishing the value of their work by means of his machinery. He took a curious mode of revenging himself, in constructing a machine with which an ass executed a piece of flowered stuff!

Another of his remarkable productions was an asp, which he made for the representation of Marmonet's "Cleopatra." It imitated all the movements of the living reptile, and hissed to the life. This gave rise to a *bon-mot*; some one, being asked his opinion of the merits of the tragedy, replied, "I am of the opinion of the asp!" Vaucanson also made a mechanism to imitate the circulation of the blood, in which Louis XV took much interest; but he abandoned it, on account of the extreme slowness of the progress made by the royal workmen. Probably he was anxious to confine his attention to more profitable matters.

He had now justly obtained for himself great renown; and the celebrated Voltaire, sharing in the general feelings of admiration entertained for this really remarkable man, wrote some lines in his honour, in which he was compared to Prometheus, who snatched fire from heaven to animate the work of his hands.

In the latter years of Vaucanson's life, he was severely afflicted by long and painful disease; nevertheless, he preserved all his energy and spirit unimpaired. To the very last he employed himself diligently about the construction of a machine he had invented for making an interminable chain. "Lose no time," he cried to his workmen; "perhaps I shall not live long enough to explain perfectly all my idea." He expired in November, 1782. His valuable collection of machines at the Hôtel de Montagne, he bequeathed to the sovereign. It was at first proposed that this gift should be presented to the Academy of Sciences; but other claims were urged, disputes and difficulties arose, and the result was that the collection was dispersed.

We cannot help regretting that the great skill

displayed by Vaucanson was not more usefully directed; for, however curious and ingenious the construction of such works as his automata, this species of labour turns to no serious account, and will never suffice to perpetuate a man's name in the grateful remembrance of his species; whereas, on the other hand, the inventor of a safety-lamp, or of a Jacquard-loom, will never be forgotten.

PHILOSOPHY OF CONVERSION.

It is easy to assert that the whole is nothing more than the conception of a few men of heated imaginations, but it is much more difficult to prove such an unwarranted assertion. Multitudes of persons in the present day are ready to attest the results experienced by themselves. Many of these witnesses, too, are individuals whose intellectual powers would not shrink from a comparison with those of their opponents. A similar testimony will be found to have been borne by numbers in every age, comprising in their ranks writers whose productions have justly been esteemed masterpieces of the human intellect. Let those who are conscious of no such change having passed upon themselves, suspend, therefore, the thoughtless ridicule with which it is so easy to treat the subject, and awake, ere it is too late, to the necessity of obtaining this important renovation of their moral and spiritual nature.

The process which we have attempted to delineate is variously termed in Scripture, "a being born again," "a new creation," "a passing from darkness to light," "a renewing" of the soul, essentially requisite to fit it for a future state of happy existence. The slightest consideration must satisfy the candid inquirer of the hopelessness of attempting in his own strength to effect so momentous a change. Happy are they who thus feel their own weakness; they will the better appreciate the value of that assistance which the Divine goodness has provided for them. The Word of God, then, we may observe, assures us that the aid of the Holy Spirit, the third person in the Trinity, is necessary to the attainment of this renovation of our fallen powers. Without it, we are informed, we are utterly helpless, while, assisted by it, the most formidable obstacles will in vain oppose our progress. This doctrine of regeneration, like the other leading truths of the Christian system, has been made the subject of bitter opposition. Although, however, it may have occasionally been abused by impostors or enthusiasts, it will be found to be one in strict harmony with the deductions of all true philosophy. But, however mysterious the Spirit's manner of operation, the effects which flow from it are certain. Peace with God is given. Love to the Saviour is kindled. The conscience is quickened. That power, in turn, chains down the passions which had so long acted as tyrannical masters. The passions being subdued, the judgment, now unbiassed by them, becomes clear. The affections, no longer unwilling to love a Being whose laws are at last obeyed, expand from the contracted range of earthly objects, to which they had before been confined, and centre themselves upon God and heavenly things. The various powers of the soul, now working in obedience to the will of God, cease to act in opposition to each other, and move in harmony and peace. The nature of this change, however, and the whole doctrine of the Holy Spirit's influence, are much more easily felt by experience than explained in theory. To those who would understand them aright, we would recommend earnest prayer for the spirit's aid: then, as in answer to it, they find the conscience quickened, the judgment enlightened, the passions purified, the affections centered on proper objects; they will discover that they have been blind before, and recognise in the Holy Spirit one of the most inestimable blessings ever offered to the acceptance of mankind.—"The Three Questions," by the author of "The Mirage of Life." Religious Tract Society.

VARIETIES.

PERPETUAL CHANGES IN THE BODY.—Our bodies are at all times like the fire which was shown to the hero of the "Pilgrim's Progress" in Interpreter's house, which had water poured on it, on one side of the wall, against which it blazed, and oil on the other. Here one tissue is burning like fuel, and there another is becoming the depository of combustible matter. We have, as it were, millions of microscopic wind furnaces, converting into carbonic acid, water, vapour, and other products of combustion, all the combustible elements of the body; and millions of blast furnaces, reducing the starch and sugar of the food, and the sulphates and phosphates of the body, into inflammable oils and other fuels, which are finally transferred to the wind-furnaces, and burned there. Burning, and what we must call in contradistinction, unburning, thus proceed together; the flame of life, like a blow-pipe flame, exhibiting an oxidizing and a reducing action, at points not far distant from each other. Such is the human body, ever changing, ever abiding. A temple always complete, and yet always under repair. A mansion which quite contents its possessor, and yet has its plans and its materials altered each moment. A machine which never stops working, and yet is taken to pieces in the twinkling of an eye, and put together in the other. A cloth of gold, to which the needle is ever adding on one side of a line, and from which the scissors are ever cutting away on the other. Yes; life, like Penelope of old, is ever weaving and unwrapping the same web, whilst her grim suitors, disease and death, watch for her halting; only for her there is no Ulysses who will one day in triumph return.—*Dr. George Wilson.*

INSTINCT OF PIGEONS.—I have been led to these remarks on the instincts of birds, by the communications of two kind friends, Sir John Richardson and Alfred Newton, Esq., on the same subject, and I give here, by permission, that of Sir John Richardson in his own words: "With respect to Sir John Ross's pigeons, as far as I can recollect, he despatched a young pair on the 6th or 7th of October, 1850, from Assistance Bay, a little to the west of Wellington Sound, and on the 13th of October a pigeon made its appearance at the dove-cote in Ayrshire, from whence Sir John had the two pairs of pigeons which he took out. The distance direct between the two places is about 2000 miles. The dove-cote was under repair at this time, and the pigeons belonging to it had been removed; but the servants of the house were struck with the appearance and motions of this stranger. After a short stay it went to the pigeon-house of a neighbouring proprietor, where it was caught and sent back to the lady who originally owned it. She at once recognised it as one of those she had given to Sir John Ross; but to put the matter to the test, it was carried into the pigeon-house, when out of the many niches it directly went into the one in which it had been hatched. No doubt remained in the mind of the lady of the identity of the bird." By what extraordinary power did this interesting bird find its way, and by what route did it come?—*Yarrel's "History of British Birds."*

THE HEIR OF WASHINGTON.—In 1820, a portion of the Mount Vernon negroes were sold by Bushrod Washington to the New Orleans market, much to their grief and astonishment, for the poor creatures had always been under the impression that they were shamble-proof by the will. What Mr. John A. Washington may do in imitation of his predecessor may not be asserted positively. "The Baltimore Sun," published in that city where "The Star-Spangled Banner" was indited under the duplicate fires of war and liberty, publishes the following advertisement:—"500 Dollars Reward.—Run away from my farm near Salem, in Fauquier County, Virginia, my negro man, Joe. Joe is about twenty-one years old, five feet ten or eleven inches high, and very dark, though not entirely black, colour. He has a very plain deep scar on his throat—I think on his right side.

His address and manners are polite. He was purchased a short time since from Mr. John Richardson, near Berryville, Clarke County, Virginia, and will probably go either in that direction or towards the Point of Rocks. One hundred dollars reward will be paid for him if taken in Virginia, the District of Columbia, or on the Potomac River. Two hundred dollars if taken in Maryland, and one half of what he will sell for in Alexandria, if taken elsewhere. In any event to be secured and delivered to me, in the county jail of Alexandria, Va., before the reward is paid.—JOHN A. WASHINGTON, Mount Vernon, Va., Jan. 14, 1859."—*New York Tribune.*

FLIES IN AMBER.—The hot sun is riding high over the recesses of one of the tertiary forests, never yet trodden by human foot, and lighting up the waved lines of delicate green with which spring, just passing into early summer, has befringed the dark pines, and the yet unwithered catkins of the poplar and plane, and the white blossoms of the buck-thorn. The cave-bear and hyena repose in silence in their dens, and not a wandering breeze rustles among the young leafage. And lo! where the forest glade terminates in a brown primeval wilderness, the sunbeams fall with dazzling brightness on the trunk of a tall, stately tree, just a little touched with decay; and it reflects the light far and wide, and gleams in strong contrast with the gloom of the bosky recesses beyond, like the pillar of fire in the wilderness relieved against the cloud of night. 'Tis a decaying pine of stateliest size, bleeding amber. The insects of the hour flutter around it; and when, beguiled by the grateful perfume, they touch its deceitful surface, they fare as the lords of creation did in a long posterior age, in that

"Serbonian bog
Betwixt Damietta and Mount Casius old,
Where armies whole have sunk."

But, as happened to so many of the heroes of classic history, death is fame here, and by dying they became immortal; for it is from the individuals who thus perish that future ages are to learn that the species which they represent ever existed, or to become acquainted with even the generic peculiarities by which they were distinguished.—*Hugh Miller's "Sketch Book of Popular Geology."*

THE DIVINE LAW OF LOVE.—Various as the precepts are which compose the Divine law, they may all of them, we would observe, be traced up to two grand seminal principles—love to God, and the love of our neighbour as ourselves. The comprehensive range of these motives is in general but little understood. When followed through all their ramifications, however, they may be said to form the key to the moral government of God. Were their operation to exist perfectly in every human breast, misery would immediately be at an end. Each person, supremely desirous of pleasing his Creator, would but wait to know his will, to execute it with alacrity and delight. Each person, too, loving his neighbour as himself, (which is but a branch of the former duty,) the reign of selfishness would cease. There would be no fraud, no violence, no injustice: an age more truly golden than that of the poets would return, and peace, and joy, and happiness, again revisit the earth.—*The Three Questions.*

PERISHED TRIBES.—There remain curious traces in the New World of perished tribes. The Bible, translated into an old Indian language, from which the devoted David Brainerd taught so successfully a nation of red men, still exists: but it speaks in a dead tongue, which no one can now understand, for the nation to whom he preached has become extinct. And Humboldt tells us, in referring to a perished tribe of South America, that there lived in 1806, when he visited their country, an old parrot in Maypures which could not be understood, because, as the natives informed him, it spoke the language of the Atures.—*Hugh Miller's "Testimony of the Rocks."*